LD 3-19-02 Amdt 3/A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: LENNY LOW ET AL. : Date: February 28, 2002
Serial No. ~~09/823,072~~ 09/841373 :
Filed: March 30, 2001 : Group Art Unit: 3743
For: SPACECRAFT RADIATOR SYSTEM AND METHOD: METHOD USING EAST WEST COUPLED RADIATORS : Examiner: Nihir B. Patel

AMENDMENT

Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

In response to the Office Action mailed February 13, 2002, please amend the above-identified patent application as follows.

IN THE SPECIFICATION

Please amend the Abstract to read as follows

A1

A spacecraft, along with [an improved] a spacecraft radiator system and spacecraft heat dissipation method are disclosed. The spacecraft comprises a body, a plurality of solar arrays, and the spacecraft radiator system. The spacecraft radiator system comprises first and second opposite facing payload radiators, first and second opposite facing deployable radiators, and one or more coupling or loop heat pipes cross coupling opposite facing payload and deployable radiators so that they function in tandem. By cross-coupling the opposite facing payload and deployable radiators, one of the two radiators acting in tandem is always in the shade during solstice seasons. Consequently, the solar load processed by the radiator system is minimized, thereby, increasing the thermal dissipation capability of the radiator system by approximately 15%.

IN THE CLAIMS

Please amend the following Claims to read as follows

A2

5. A spacecraft heat dissipation method comprising the steps of:

configuring a spacecraft to have a body, a plurality of solar arrays, first and second opposite facing payload radiators, first and second opposite facing deployable radiators, and loop heat pipes cross coupling opposite facing payload and deployable radiators;

launching the spacecraft into orbit; and

when in orbit, cross coupling heat coupled to a respective payload radiators to an opposite facing deployable radiator.